

a source which produces traffic for connections having known traffic characteristics and unknown traffic characteristics with no parameters specified, said traffic having unknown characteristics including traffic with weighted priorities and traffic without weighted priorities;

*Q 2*  
a network on which traffic travels, said source connected to said network, said source sends said traffic having known traffic characteristics and unknown traffic characteristics with no parameters specified onto the network; and

a destination which is connected to the network and receives the traffic having known traffic characteristics and unknown traffic characteristics with no parameters specified.

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3. A source for producing ATM traffic for a network with switches comprising:

*Q 3*  
a mechanism which produces traffic for connections having unknown traffic characteristics with no parameters specified, said traffic including traffic with weighted priorities and traffic without weighted priorities; and

a mechanism for transmitting the traffic to the network.

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12. A switch for switching traffic on an ATM network from a source to a destination comprising:

a mechanism for receiving traffic for connections having unknown traffic characteristics with no parameters specified, said traffic including traffic with weighted priorities and traffic without weighted priorities;

a mechanism for transmitting the traffic for connections to the network, said transmitting mechanism connected to the receiving mechanism; and

a scheduler for scheduling when the connections having traffic with unknown characteristics having weighted priorities are to be transmitted to the network, said scheduler connected to the transmitting mechanism and the receiving mechanism.

18. A method for transferring traffic in an ATM communication system comprising the steps of:

transmitting from a source traffic of a connection having unknown traffic characteristics with no parameters specified with a weighted priority onto an ATM network; and

*(15)*  
transmitting from the source traffic of another connection having unknown  
traffic characteristics with no parameters specified without a weighted priority onto the ATM  
network.